

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s) : Per Martinsson, et al.
Serial No. : 10/608,630
For : WEAR LEVEL INDICATING FILAMENTS AND
FABRICS (AND GUIDELINE APPLICATIONS)
Filing Date : June 27, 2003
Examiner : Andrew T. Piziali
Group Art Unit : 1794
Confirmation No. : 8456

745 Fifth Avenue
New York, NY 10151
August 28, 2008

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Claims 1, 3, 5, 7-12, 14-15, 17, 19, 21-26, and 28-48 are pending in the application; claims 5, 7-12, 19, 21-26, and 29-47 are withdrawn from further consideration. Claims 1, 3, 14-15, 17, 28 and 48 are rejected in the Final Office Action mailed on May 28, 2008 (the "Office Action").

Applicant respectfully requests the Panel to consider the following arguments. Claims 1, 3, 14, 15, 17, 28, and 48 are rejected under 35 U.S.C. §103(a) over U.S. Patent No. 4,093,512 to Fleischer ("Fleischer") in view of U.S. Patent No. 3,800,019 to Parsey ("Parsey") or U.S. Patent No. 6,653,943 to Lamb ("Lamb"). Claims 1, 3, 14-15, 17, 28 and 48 have been rejected under 35 U.S.C. §103(a) over Fleischer in view of "Applicant's Disclosure" and Parsey or Lamb. For the reasons set forth below, Appellants traverse and respectfully request reconsideration and withdrawal of the rejections.

The Office Action maintains the rejections combining Fleischer with Parsey or Lamb. As to Fleischer, the Office Action alleges that coating the monofilaments before forming the fabric renders the article identical, or only slightly different from Fleischer's fabric. Appellants disagree.

Independent claims 1 recites:

A papermaking fabric multilayer monofilament, said multilayer monofilament having a core and a sheath comprising a plurality of respective layers visibly distinguishable from one another and the core by their contrasting color, or reflectivity for indicating a level of wear of a papermaking fabric comprised thereof, wherein said multilayer monofilament is formed before being used in said papermaking fabric. (Emphasis added).

Independent claims 15 and 48 each recite:

one or more multilayer [mono]filaments each having a core [and a sheath] [comprising/comprised of a monofilament yarn surrounded by] a plurality of respective layers visibly distinguishable from one another and the core by their contrasting color, or reflectivity for indicating a level of wear, wherein said multilayer monofilament is formed before being used in said endless industrial fabric.

Fleischer's two step resin treatment coating the fabric itself, unlike the claimed monofilament coated before forming the fabric, would result in a fundamentally different product with respect to indicating a level of wear. In particular, Fleischer's post-fabric coatings would fail to, inter alia, (a) cover the whole monofilament (hence failing to layer or sheath it) and (b) non-uniformly coat the filaments at the interstices and the points where warp and weft intersect. In actual use either or both of the lack of coverage and irregularity of the applied coatings make them ill-suited to be adapted to detect wear via any visual distinction between the respective layers and the core, and in fact doing so would likely confuse, rather than aid, detection of a level of wear.

Moreover, Fleischer's objective is to produce a papermakers' belt with ultra high modulus load bearing yarns such that the belt has improved stretch resistance. As pointed out in Appellants' Response dated June 22, 2007, Fleischer attempts to achieve an improvement in

tensile strength and stretch resistance of forming fabrics woven from multifilaments by employing high tenacity materials. Ordinarily skilled artisans, however, know that materials like Kevlar have very poor abrasion resistance when used in papermaking fabrics, and therefore in order to survive, these materials **must be wrapped and/or coated**.

The above-claimed multilayer monofilament, contrariwise, gives a papermaker an idea of how and to what levels the wear or at what rate the wear is occurring **before** catastrophic failure occurs. If the coating on the Kevlar yarn of Fleischer is gone, the fabric is in imminent failure mode, therefore providing for all or nothing. On the other hand, with the above-claimed multilayer monofilament, the papermaker is alerted to, in advance, the state of the papermaking fabric with the plurality of layers indicating a level of fabric wear, such that the papermaker could replace it with a new fabric in case of a worn out state, thus avoiding a catastrophic failure and subsequent repair/losses. As a result, an ordinarily skilled artisan would have no reason to adapt Fleischer's coated filaments with contrasting color or reflectivity as this would provide no effective warning at all.

Further, despite the fact that Fleischer states that its yarn can be of multifilament or monofilament form, an ordinarily skilled artisan would appreciate that at present no such material exists in monofilament form with the modulus specified that can be used in paper machine clothing (flexibility, abrasion resistance etc). The only materials that exist are multifilaments such as the aramids Fleisher expressly teaches, which is to be expected as they cannot be made into monofilament form. Quite simply, no such "Ultramono" exists for the claimed invention. And again, if Fleisher's coating or wrapping wears away, the aramids have such poor abrasion resistance they will catastrophically fail.

The Office Action denies that Parsey and Lamb are non-analogous art, despite the fact that each relate to rope structures and neither of them teach or suggest use of a monofilament. Moreover, as the Examiner cites to the *KSR v. Teleflex* ("KSR") case for the proposition that a technique has been used to improve one device – then it is proper to look at the **devices** actually disclosed in Parsey and Lamb to determine if either is indeed similar. One of ordinary skill in the papermaking art would not look to rope-making generally, or into the elevator suspension ropes or marine water cordages specifically taught therein, to come up with a solution for wear in papermaking fabrics. A papermaking fabric is not similar to a rope.

Along the same lines, at page 3, the Office Action states Parsey (at Col. 2, lines 8-29) and Lamb (at Col. 4, lines 20-35), "each disclose that it is known in the wear detecting art that a core may be surrounded by a plurality of outer layers of different colors to indicate degree of wear." Of course, neither of these references refer to or even imply a "wear detecting art," because there is no such thing. To the contrary, and as amply explained in prior responses, Parsey and Lamb are concerned with rope-making, and not industrial fabrics, and far less so papermaking fabrics. In particular, the references disclose sheathing (and re-sheathing) a rope to detect wear of a rope, not a yarn, and certainly not a monofilament. An ordinarily skilled artisan simply would not look to ropes – be they for elevators or marine cordage – as a material to make papermaking fabrics out of, or to seek solutions for problems associated with papermaking fabrics.

Finally at page 5, the Office Action employs hindsight reasoning to supply a reason for its application of Fleischer, noting that "Applicant discloses that a means for monitoring wear on a papermaker's fabric, and particularly at any point on its inner and outer surfaces, even when the paper machine is operating, would be very helpful to those in the papermaking industry." Appellants respectfully note that KSR cautions that hindsight reasoning based on an Applicants' own disclosure distorts analysis: "[a] factfinder should be aware, of course, of the distortion caused by hindsight bias and must be cautious of arguments reliant on ex post reasoning." Emphasis added. As MPEP 2174 "Legal Concept of Prima Facie Obviousness" states:

[T]o reach a proper determination under 35 U.S.C. 103, the examiner must step backward in time and into the shoes worn by the hypothetical "person of ordinary skill in the art" when the invention was unknown and just before it was made. In view of all factual information, the examiner must then make a determination whether the claimed invention "as a whole" would have been obvious at that time to that person. Knowledge of applicant's disclosure must be put aside in reaching this determination, yet kept in mind in order to determine the "differences," conduct the search and evaluate the "subject matter as a whole" of the invention. The tendency to resort to "hindsight" based upon applicant's disclosure is often difficult to avoid due to the very nature of the examination process. However, impermissible hindsight must be avoided and the legal conclusion must be reached on the basis of the facts gleaned from the prior art.

Emphasis added. Indeed Appellants do not deny that its claimed invention is very helpful to those in the papermaking industry. Moreover, the Specification also explained that "[n]ormally,

wear is monitored using a thickness gauge. However, it is difficult to measure the thickness of a papermaker's fabric more than a foot or two in from its edges with such a gauge...." The fact that the Appellants identified and provided a solution to long-felt need (monitoring-wear) argues in favor of non-obviousness, not against it.

For the reasons given above, neither Fleischer, Parsey, Lamb, nor the Appellants' own disclosure, alone or in combination, disclose or render obvious the above-recited limitations of independent claims 1, 15 and 48. As all the claims ultimately depend from these independent claims, Appellants urge all the claims are presently in condition for allowance.

CONCLUSION

In view of the foregoing amendments and remarks, all of the claims in this application are patentable over the prior art and an early and favorable consideration thereof is solicited. Accordingly, a Notice of Allowance is earnestly solicited.

Please charge any fees incurred by reason of this response and not paid herewith to Deposit Account No. 50-0320. Please charge any fees incurred by reason of this response and not paid herewith to Deposit Account No. 50-0320

Respectfully submitted,

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